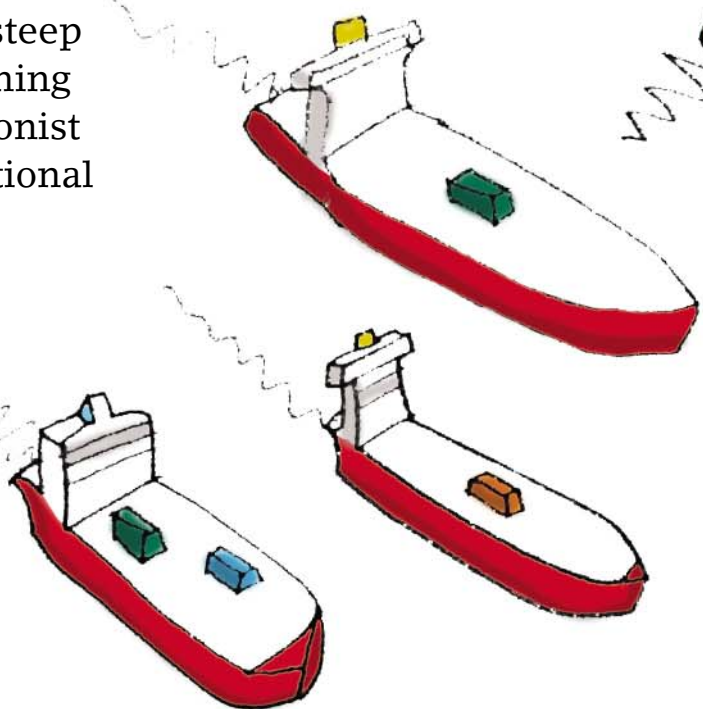


World trade fell dramatically in 2009 after the financial crisis worsened in the autumn of 2008. According to research by **Giordano Mion** and colleagues, the trade collapse reflected a steep drop in global demand rather than something specific to trade, such as growing protectionist measures. This was not a crisis of international trade itself.

Trade crisis – what trade crisis?



World trade in manufactured goods fell by about 30% between the first half of 2008 and the first half of 2009. This trade collapse exceeded the fall in global GDP as well as the trade fall predicted by many standard economic models.

Explanations abound, as illustrated by the comprehensive discussion in the volume of studies edited by Richard Baldwin (2009). Some emphasise a crisis of the supply side of trade, citing such causes as a shortage of trade finance, disruption of global value chains and increased barriers to trade as governments implemented protectionist measures. For others, the fall in trade is simply the flipside of a fall in the demand for manufactured goods, postponed purchases of intermediate goods and the drawing down of inventories.

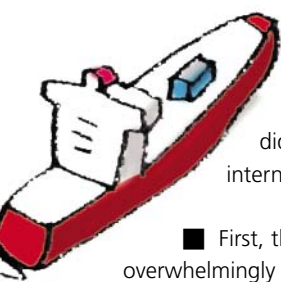
Which explanations turn out to be correct? Analyses at the aggregate level and/or the level of broad product categories are not well suited to providing a clear answer to this question because

the different effects and margins of trade adjustment cannot be separately identified. Econometric analysis of firm-level data is therefore critical to discriminate between alternative explanations.

Yet despite a wealth of statistical analysis, econometric work on firm-level data is scarce. To the best of our knowledge, only one study makes use of some firm-level data, examining the fall in French trade among various classes of exporter size and various sectors that depend to different degrees on external finance (Bricongne et al, 2009). But the study does not exploit individual firm characteristics to discriminate between different explanations for the trade collapse.

Our research tries to fill this gap, using data on Belgian exports and imports at the firm-product-country level as well as a wealth of balance sheet information. We compare the first half of 2008 and the first half of 2009 as Belgium's trade collapse started in November 2008. Four key findings stand out, which together

The trade collapse was driven by changes in prices and quantities rather than changes in numbers of active firms, products traded and national markets served



lead us to conclude that the trade collapse did not result from a crisis of international trade itself:

■ First, the fall in trade overwhelmingly occurred at the 'intensive margin' – that is, in the prices that trading firms charged and the quantities they sold – rather than at the 'extensive margin' – that is, in the number of firms involved in trade and the range of products they sold and national markets they served.

■ Second, the fall in demand for tradable goods – which particularly affected durables and intermediate goods – represents the most important explanation for the decline in the

intensive margin, contributing 70-80% of the total fall.

■ Third, although trade finance and involvement in global value chains played some role in the reduction of trade, they affected domestic operations in a roughly similar way.

■ Fourth, percentage changes in exports and imports did not systematically deviate from changes in turnover and intermediate consumption respectively.

A fall at the intensive margin of trade

Which margins mattered most for the 2009 trade collapse: firm entry or exit; adding or dropping products and markets; or price and quantity adjustments? The answer to this question is important: changes at the intensive margin (where

firms reduce prices and quantities within existing trading relationships) are likely to be less durable and less costly than changes at the extensive margin (where firms drop out of some markets altogether or reduce the range of products sold).

Table 1 shows that virtually all of the trade collapse was driven by changes in the prices quoted and the quantities shipped. Though both exports and imports fell by about 27%, almost all trading firms remained active, with hardly any changes in the average number of countries they traded with or in the average number of products shipped to or sourced from each country.

On the one hand, these results echo findings by CEP's Stephen Redding and colleagues on the impact of the Asian financial crisis on US trade along these different margins (Bernard et al, 2009). They also confirm evidence on comparable French data for the 2008-09 crisis (Bricongne et al, 2009).

On the other hand, these results highlight the extreme flexibility of business relationships across firms, their input suppliers and their clients. This is reassuring: a massive reduction in the number of trading firms, countries or products would probably make recovery more costly and sluggish.

Table 1:

Changes in the margins of Belgian trade, comparing the first half of 2008 and the first half of 2009

Total imports (all firm-country-product combinations)

		Extensive margin			Intensive margin	Components of sales	
Period	Total imports	Firms	Countries	Products	Sales	Quantities	Prices
First half of 2008	€106.10bn	31,497	3.88	7.02	€123,681	118,747	1.04
First half of 2009	€76.64bn	33,576	3.74	6.78	€89,855	98,089	0.92
Percentage change between 2008 and 2009	-27.77%	6.60%	-3.54%	-3.32%	-27.35%	-17.40%	-12.05%
Percentage contribution of each margin to the fall in trade			1.79%		98.21%		

Total exports (all firm-country-product combinations)

		Extensive margin			Intensive margin	Components of sales	
Period	Total exports	Firms	Countries	Products	Sales	Quantities	Prices
First half of 2008	€101.25bn	18,053	6.62	5.58	€151,844	115,277	1.32
First half of 2009	€74.69bn	18,227	6.49	5.59	€112,925	92,221	1.22
Percentage change between 2008 and 2009	-26.23%	0.96%	-1.92%	0.16%	-25.63%	-20.00%	-7.04%
Percentage contribution of each margin to the fall in trade			2.68%		97.32%		

Few systematic differences within or between industries

Next, we analyse the fall in the intensive margin of trade across the firm, country and product dimensions to see if some firms, industries, countries or products were affected more than others. Our analysis shows that the intensive margin fall was driven by a generalised reduction in demand for tradables as measured by the reduction of GDP growth in the destination markets.

Our analysis further reveals that demand for consumer durables and intermediate goods was more severely affected than demand for consumer non-durables. The remaining fall in trade is explained by the poor financial health of firms in the wake of the credit crunch and their degree of involvement in international value chains.

A comparable fall in domestic operations

Finally, we consider changes in exports-to-turnover and imports-to-intermediates ratios at the firm level. This allows us to compare the magnitude of the fall in domestic economic activity with the magnitude of the fall in international trade. On aggregate, the ratios of exports and imports to production did not fall, confirming other evidence for OECD

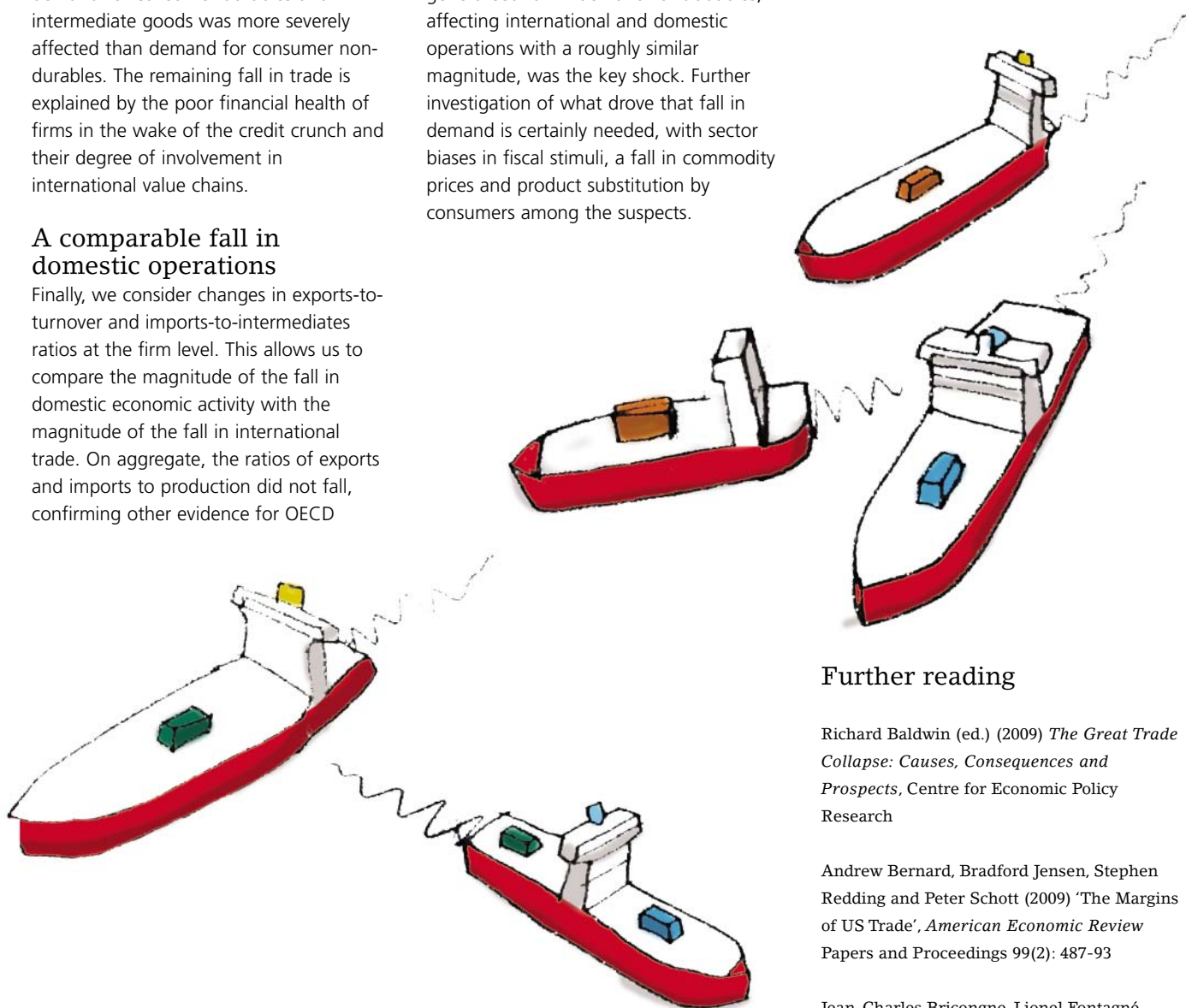
countries (Eaton et al, 2009). Crucially, our analysis reveals no cross-industry pattern and no differences driven by firm characteristics, indicating that finance and disruption of value chains affected firms' international and domestic activities equally.

Conclusion

Our investigation leads to the conclusion that trade per se is not in crisis and so it would be better to talk about a trade collapse rather than a trade crisis. A generalised fall in demand for tradables, affecting international and domestic operations with a roughly similar magnitude, was the key shock. Further investigation of what drove that fall in demand is certainly needed, with sector biases in fiscal stimuli, a fall in commodity prices and product substitution by consumers among the suspects.

This article summarises 'Trade Crisis? What Trade Crisis?' by Kristian Behrens, Gregory Corcos and Giordano Mion, CEP Discussion Paper No. 995 (<http://cep.lse.ac.uk/pubs/download/dp0995.pdf>).

Kristian Behrens is at the Université du Québec à Montréal. **Gregory Corcos** is at the Norwegian School of Economics and Business Administration. **Giordano Mion** is a lecturer in economic geography at LSE and an associate in CEP's globalisation programme.



Further reading

Richard Baldwin (ed.) (2009) *The Great Trade Collapse: Causes, Consequences and Prospects*, Centre for Economic Policy Research

Andrew Bernard, Bradford Jensen, Stephen Redding and Peter Schott (2009) 'The Margins of US Trade', *American Economic Review* Papers and Proceedings 99(2): 487-93

Jean-Charles Bricongne, Lionel Fontagné, Guillaume Gaulier, Daria Taglioni and Vincent Vicard (2009) 'Firms and the Global Crisis: French Exports in the Turmoil', Banque de France Working Paper No. 265

Jonathan Eaton, Sam Kortum, Brent Neiman and John Romalis (2009) 'Trade and the Global Recession', mimeo

The trade collapse highlights the extreme flexibility of business relationships across firms, their input suppliers and their clients